Management Unit for TPN Series

TPN-MMU-X100-20 is the management unit for Lightware's TPN AV Over IP product line. With this control unit and an off-the-shelf 10G Ethernet switch installed as a crosspoint in the system, a virtual matrix can be created for TPN devices connected to the IP network as input and output endpoints.

Details

Matrix Management Unit for Lightware's new **10 Gb AV-over-IP extension family TPN, where scalability, flexibility and rapid deployment are in focus. It boasts enhanced features like. TPN is a virtual matrix system, designed for seamless switching of audio, video, and USB transmission, featuring a delay of less than 1 frame.**

The **TPN-MMU-X100** has been designed to enable the fastest and simplest configuration of **Lightware TPN systems**.

The **TPN-MMU-X100** runs an **SDVoE Control Server instance** and exposes a **Lightware API** on top of it, allowing users to integrate their systems with minimal effort.

The **TPN-MMU-X100-20** is the smaller version of the **TPN-MMU-X100**, recommended for controlling a maximum of **20 endpoints**.

With its built-in **device discovery** feature and **professional network management** tools, the application ensures that system installation is both **fast and error-free**.

From the MMU interface, individual endpoints can be easily named, and all **Lightware SDVoE-specific settings**—including **Serial (RS-232) port configuration**—are accessible from one place.

The system also includes integrated **video crosspoint routing** (with upcoming **USB and audio crosspoint** support), making it simple to configure and later modify the connections of **audio, USB, and video streams** between endpoints.

When the **Lightware TPN MMU** is part of the system:

- You gain a **centralized management layer** - all TPN endpoints are discovered automatically and controlled from **one interface**.

- **Configuration time is drastically reduced** settings can be pushed to multiple devices simultaneously.

- **Crosspoint routing** (video, audio, USB) is visual, fast, and intuitive - (First release USB and Audio will just follow the Video)

- The MMU creates a **bridge between AV and IT**, allowing secure deployment within both **AV Network** and **Corporate network** environments.

Features

- **Integrated Device Discovery** Automatically detects and manages SDVoE devices through a built-in, intuitive interface.

- **Easy TPN System Configuration** Quickly and easily build complete system configurations with dynamic endpoint naming.

- **Advanced Network Configuration** Simplified setup for both automatic and static IP addressing. Includes intelligent error detection to resolve potential network incompatibilities.

- **Secure Multi-Network Operation** Operates seamlessly across AV Utility and Corporate network segments, ensuring secure and reliable integration.

- **Scalable Control Management** Centrally manage up to 20 connected endpoints simultaneously from a single interface.

- **Comprehensive Endpoint Configuration** Easily configure scaler settings, RS-232 serial parameters, and inject custom commands directly from the management interface.

- **Intuitive Video Crosspointing** Seamless video routing between transmitters and receivers, ensuring flexible and efficient signal control.

- **Built-in LARA Support** Includes integrated LARA audio communication and monitoring features within the MMU interface.

- **Future-Ready Platform** Firmware-upgradable architecture designed for upcoming protocol extensions and new device families.

Specifications

General	Operating Temperature	0 to 45°C (32 to 113 °F), 10% to 90%, non-condensing
	Storage Temperature	-20 to 70°C (-4 to 158 °F), 10% to 90%, non-condensing
	Power Consumption	< 4 W
	ESD Protection Human-body Model	±8kV (Air-gap discharge) / ±4kV (Contact discharge)
	Dimensions	221mm x 25mm x 120mm (W x H x D)
	Weight	698g (without power supply)